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On the anatomy of the breast - Of the development of the male breast

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OF THE DEVELOPEMENT OF THE
MALE BREAST.

IN the foetal state a gland exists behind the nipple, similar in appearance and structure to that in the female foetus. *See Plate 1, fig. 16.* This plate shows the form of the gland, which is of a red colour in the foetus, and is surrounded by a yellow fat, so that the contrast of colour renders it particularly conspicuous.

A cleft is formed where the future nipple is to be found, with a number of broken points about it, marking the situation of the future papillæ.

It contains ducts, from which a white and rather a solid matter may be squeezed which I have seen resembling curd in its appearance.

These ducts I have injected with mercury, and I have two good preparations of them. *Plate 1, figs. 17 and 18.*

At twelve months, the cleft of the nipple is filled up, and the broken papillæ are united.

At three years of age, *fig. 4*, when a section is made of it, the direction of the branches of ducts can be seen concentrated at the nipple, and diverging to the base of the gland and posterior fascia, in which they are fixed.

At seven years of age, fig. 5, the nipple is more evolved, and the gland is seen covered and united in its different parts by fascia.

At thirteen years, fig. 6, there is little difference of appearance.

From this time to twenty-one, the nipple grows, and forms a much larger cone; the gland becomes considerably increased; the hairs and the tubercles grow upon the surface of the areola, *Plate 1*, figs. 2 and 3; the voice becomes broken; the beard grows; and the figure denotes manhood.

In *Plate 1*, fig. 7, I have given the section of a male breast at twenty-nine, when it has been for a long time completely evolved; and in the same plate, fig. 8, I have given another section, to show its size at thirty-eight.

Fig. 1 of the same plate shows the size of the nipple at six years; fig. 2, at the age of forty-three years; in fig. 3, it is seen in age, with the hair by which it is covered.

In *Plate 2*, fig. 1, a male nipple with its tubercles, which form two circles, are displayed; and in fig. 2, a view is given of a gland of a moderate size. At fig. 15, the very large gland is seen which I have mentioned, connected with a small testis in the adult, as exhibited at fig. 16.

In old age the nipple is somewhat smaller than in the

adult, but the gland is sometimes very large, as is seen in *Plate 2, fig. 3*, where the gland has been minutely injected in a man at seventy-three years, and makes a beautiful preparation. A large absorbent vessel proceeds from it to one of the absorbent glands in the axilla.

The fluid which the gland secretes is extremely small in quantity, passing from the orifices of the ducts in very small drops, and more frequently capable of being expressed in the dead than in the living body; but persons have told me, that they could press from their own breasts a fluid like white of egg; whether it is from the mucous membrane of the ducts, or from the cells of the gland, I cannot possibly say, but in the dead I have often expressed it from the nipple.

When I have filled the ducts with mercury I could by compressing the gland force globules from the gland at the orifices of the nipple.

The fluid, which looks like clear mucus, and which can be sometimes expressed from the nipple, is in part coagulated by alcohol.

Before the age of puberty I have not injected the male gland, excepting in the foetal state, although I do not mean to deny the possibility of accomplishing it. But there is a great difference in the breast and testis in that

respect. At two years of age I have injected the vas deferens, epididymis, vasa efferentia, rete, and beginning of the tubuli testis, and I have two beautiful preparations of these, showing the early developement of that organ, so that at two years the ducts are formed. If it be so also in the male mammary gland, I have not yet succeeded in injecting the ducts prior to the time of puberty except in the foetus.
